Guidelines for Laboratory Design: Health, Safety, and Environmental Considerations, 4th Edition
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DESCRIPTION

Proven and tested guidelines for designing ideal labs for scientific investigations

Now in its Fourth Edition, Guidelines for Laboratory Design continues to enable readers to design labs that make it possible to conduct scientific investigations in a safe and healthy environment. The book brings together all the professionals who are critical to a successful lab design, discussing the roles of architects, engineers, health and safety professionals, and laboratory researchers. It provides the design team with the information needed to ask the right questions and then determine the best design, while complying with current regulations and best practices.

Guidelines for Laboratory Design features concise, straightforward advice organized in an easy-to-use format that facilitates the design of safe, efficient laboratories. Divided into five sections, the book records some of the most important discoveries and achievements in:

- Part IA, Common Elements of Laboratory Design, sets forth technical specifications that apply to most laboratory buildings and modules
- Part IB, Common Elements of Renovations, offers general design principles for the renovation and modernization of existing labs
- Part II, Design Guidelines for a Number of Commonly Used Laboratories, explains specifications, best practices, and guidelines for nineteen types of laboratories, with three new chapters covering nanotechnology, engineering, and autopsy labs
- Part III, Laboratory Support Services, addresses design issues for imaging facilities, support shops, hazardous waste facilities, and laboratory storerooms
• Part IV, HVAC Systems, explains how to heat, cool, and ventilate labs with an eye towards energy conservation

• Part V, Administrative Procedures, deals with bidding procedures, final acceptance inspections, and sustainability

The final part of the book features five appendices filled with commonly needed data and reference materials.

This *Fourth Edition* is indispensable for all laboratory design teams, whether constructing a new laboratory or renovating an old facility to meet new objectives.

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### ABOUT THE AUTHOR

**LOUIS J. DiBERARDINIS, BS, MS, CIH, CSP**, is the Director of Environment, Health, and Safety at MIT. He is a visiting lecturer at Harvard University School of Public Health and Adjunct Professor at the University of Massachusetts Lowell in the Department of the Work Environment. He received his BS in chemical engineering from Northeastern University and an MS in industrial hygiene from Harvard University.

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The late **MELVIN W. FIRST, ScD, CIH, PE**, was a researcher and professor of environmental health Engineering at the Harvard School of Public Health for almost sixty years and was actively involved in research until a week before his death.

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